



Variation in Beliefs Towards Low Back Pain between Physiotherapy and Nursing Students

Deepali Sheth¹, James Ghagare²

¹Intern, ²MPT (musculoskeletal disorders and sports) Lecturer Sancheti Institute College of Physiotherapy, Pune 411005.

ABSTRACT

Variation in beliefs towards low back pain between physiotherapy and nursing students

The objective of this study was to find out the variation in beliefs between physiotherapy and nursing students towards low back pain.

Method: Physiotherapy (n=100) and nursing (n=100) students from various colleges in Pune city completed the survey. Fear Avoidance Beliefs Questionnaire (FABQ) was used. The participants filled up the Fear Avoidance Beliefs Questionnaire.

Result: Student Physiotherapy students had significantly lower Fear Avoidance Beliefs Questionnaire scores ($p \leq 0.05$) than nursing [CI 95%] students.

Conclusion: Physiotherapy students had less negative beliefs towards low back pain than nursing students.

Key Words: Back pain, Beliefs, Physiotherapy students, Nursing students

INTRODUCTION

Chronic low back pain (LBP) is a serious global public health problem^[1]. In fact, it is considered to be the leading cause of absence from work and limitation of activity all over the world^[2]. Physicians' attitudes and beliefs regarding low back pain could potentially influence their patients' attitudes and beliefs. Indeed, ample evidence demonstrates that the clinicians' attitudes and beliefs regarding low back pain seem to affect the beliefs of their patients^[3, 4]. Physicians' attitudes and beliefs also appeared to influence their recommendations regarding low back pain patients' activities and work^[5].^[6] Physiotherapists and nurses also spend a lot of time with patients, so their beliefs can influence the patients' beliefs regarding back pain too. Given the influence that healthcare practitioners have on a patient's recovery, there has been relatively little study on the attitudes and beliefs held by student healthcare professionals towards low back pain^[7]. There has been some investigation into this area which has looked at student nurses and physiotherapists separately^[8, 9, 10, 11]. Surprisingly, there is just one study which compares

student nurses and physiotherapists^[11], it showed that beliefs about the consequences of low back pain and fear avoidance behaviors were more negative in student nurses compared to student physiotherapists. It is important to know the beliefs of physiotherapists and nurses while they are students so that they can be trained and educated regarding the same as education about back pain does have an effect on the attitudes and beliefs of healthcare students^[12]. It is also important to find out whether there is any variation in beliefs towards low back pain between physiotherapy and nursing students which may lead to a difference of opinion and possibly the recovery in patients suffering from low back pain.

MATERIALS AND METHODS

Study design: A cross sectional survey was done amongst the physiotherapy and nursing students in Pune city who had completed at least 3rd year in their respective courses.

Procedure: Ethical approval from the institutional ethical committee was taken for this study. 101 physiotherapy and

Corresponding Author:

Deepali Sheth, Intern (musculoskeletal disorders and sports) Lecturer Sancheti Institute College of Physiotherapy, Pune 411005.
E-mail: 2deepalis@gmail.com

ISSN: 2231-2196 (Print)

ISSN: 0975-5241 (Online)

Received: 16.02.2018

Revised: 19.03.2018

Accepted: 25.04.2018

101 nursing students from different colleges in Pune city participated in this study. Written consent was taken from each of the participant and they were explained that participation in this study was completely voluntary and that confidentiality would be maintained. They then filled up the Fear Avoidance Beliefs Questionnaire.

Statistical methods: The data collected was then analyzed using Microsoft Excel and IBM Statistical Program for the Social Sciences (SPSS) version 20.0 (SPSS Inc, Chicago, IL). Average of the Physical Activity subsection and Work Activity subsection of the questionnaire was taken out for both the groups and compared [graph 1]. The scores of both the groups were compared using the Mann Whitney test. A non-parametric 0.95 confidence interval accompanies these estimates as does the 'p' value of 0.00 [Tables 1, 2].

RESULTS

Physiotherapy students had significantly lower Fear Avoidance Beliefs Questionnaire scores than nursing students [$p \leq 0.05$]. Hence, physiotherapy students have less negative beliefs towards low back pain than nursing students. [graph 1]

DISCUSSION

The results of this study indicate that student nurses had more negative beliefs about the inevitable consequences of low back pain, as well as displaying more fear-avoidant tendencies about physical activity in their day-to-day lives when compared to their physiotherapy counterparts. Similar results were found in a study which reported that nursing students had significantly more negative back pain beliefs than physiotherapy students^[12]. These differing attitudes and beliefs may be rooted in a number of factors, including level of pain knowledge, as physiotherapy students had a greater knowledge of chronic pain mechanisms when compared to nursing students^[7]. Furthermore, this study indicates that the nursing students had significantly more negative beliefs than physiotherapy students regarding the work activity and how it might affect the individual. As more negative beliefs are observed amongst nursing students, finding out the reason for this is important. Nurses are an integral part of the healthcare team and considering the influence a clinician has on the attitudes and beliefs of patients', it is important to know their beliefs towards low back pain^[15, 16]. Different methods have been used to improve the attitudes and beliefs of student healthcare professionals and general population in the past, such as campaigns on back pain^[17, 18], teaching modules^[19] and information booklets^[20]. It has been found previously that a module devoted to low back pain helps improve the

attitudes and beliefs of physiotherapy students^[19], it can be investigated in the future whether this would also pertain to other healthcare degree students, especially nursing. This might not only improve the perceptions of low back pain amongst nursing students, but also, in turn, be of benefit to patients they manage in the future^[7].

LIMITATIONS

Generalizability of results is a limitation of this study. Only one city in one country is represented in this study, limiting generalizability. Confounding factors such as curricula and level of pain knowledge were not accounted for, and factors which can in turn shape the beliefs and attitudes an individual may hold about low back pain^[19].

CONCLUSION

Results from this study show that differences exist in the beliefs of physiotherapy and nursing students toward low back pain. Physiotherapy students had less negative low back pain beliefs while nursing students had more negative beliefs. This finding highlights the need for education for nurses to promote positive beliefs towards low back pain. Further research is required to provide evidence based recommendations of how to address these contrasting beliefs.

ACKNOWLEDGEMENTS

We thank support from Dr. Rachana Dabadghav (Assistant Professor and research coordinator at Sancheti Institute College of Physiotherapy), Dr. Ashok Shyam (MS Ortho) and Dr. Parag Sancheti (Chairman of Sancheti Hospital) for their expert guidance. The authors wish to acknowledge all the participants of this study for their co-operation, giving us their valuable time and allowing us to conduct this study. Authors acknowledge the immense help received from the scholars whose articles are cited and included in references of this manuscript. The authors are also grateful to authors / editors / publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed. Lastly, I would like to make a special mention for the active technical support by my mother, Prof. Pragna Sheth and my colleague Mr. Deep Shah.

Source of funding: none

Conflict of interest: none

REFERENCES

- Regina W. S. Sit, Benjamin H. K. Yip, Dicken C. C. Chan, Samuel Y. S. Wong. Primary Care Physicians' Attitudes and Beliefs towards Chronic Low Back Pain: An Asian Study. PLOS ONE 2015, DOI:10.1371/journal.pone.0117521
- Hoy D, Brooks P, Blyth F, Buchbinder R (2010) The epidemiology of low back pain. Best Practice & Research in Clinical Rheumatology 24: 769–781. doi: 10.3928/01913913-20150114-01 PMID: 25608279
- Parsons S, Harding G, Breen A, Foster N, Pincus T, et al. (2007) The influence of patients' and primary care practitioners' beliefs and expectations about chronic musculoskeletal pain on the process of care: A systematic review of qualitative studies. Clin J Pain; 23: 91–98. PMID: 17277650
- Darlow B, Fullen BM, Dean S, Hurley DA, Baxter GD, et al. (2012). The association between healthcare professional attitudes and beliefs and the attitudes and beliefs, clinical management, and outcomes of patients with low back pain: A systematic review. European Journal of Pain; 16: 3–17. doi: 10.1016/j.ejpain.2011.06.006 PMID: 21719329
- Holden MA, Nicholls EE, Young J, Hay EM, Foster NE (2009) UK-based physical therapists' attitudes and beliefs regarding exercise and knee osteoarthritis: Findings from a mixed-methods study. Arthritis & Rheumatism; 61:1511–12. doi:10.1038/ki.2014.403 PMID: 25608049
- Ostelo RW, Stomp-vanden Berg SG, Vlaeyen JW, Wolters PM, de Vet HC (2003) Healthcare provider's attitudes and beliefs towards chronic low back pain: The development of a questionnaire. Man Ther; 8: 214–22. PMID:14559044
- Norlee Kennedy, John Heasley, Kieran O'Sullivan. The beliefs of third-level health care students towards low back pain. Pain Research and Treatment 2014; 2014, Article ID 675915
- P. H. Ferreira, M. L. Ferreira, J. Latimer et al., "Attitudes and beliefs of Brazilian and Australian physiotherapy students towards chronic back pain: a cross-cultural comparison," Physiotherapy Research International 2004; 9(1):13–23.
- S. Poiraudau, F. Rannou, G. Baron et al., "Fear-avoidance beliefs about back pain in patients with subacute low back pain," Pain 2006; 124(3):305–11.
- T. Mitchell, P. B. O'Sullivan, A. Smith et al., "Biopsychosocial factors are associated with low back pain in female nursing students: a cross-sectional study," International Journal of Nursing Studies 2009; 46(5): 678–88.
- C. Ryan, D. Murphy, M. Clark, and A. Lee, "The effect of a physiotherapy education compared with a non-healthcare education on the attitudes and beliefs of students towards functioning in individuals with back pain: an observational, cross-sectional study," Physiotherapy 2010; 96(2):144–50.
- A. Burnett, C. C. Sze, S. M. Tam et al., A cross-cultural study of the back pain beliefs of female undergraduate healthcare students, Clinical Journal of Pain 2009; 25(1):20–28.
- Esther Williamson, University of Warwick, UK, Fear Avoidance Beliefs Questionnaire (FABQ). Australian Journal of Physiotherapy 2006; 52.
- Waddell G, Newton M, Henderson I, Somerville D, Main CJ. A Fear-Avoidance Beliefs Questionnaire (FABQ) and the role of fear-avoidance beliefs in chronic low back pain and disability. Pain 1993; 52:157–168
- R.M.A. Houben, R.W.J. G. Ostelo, J.W.S. Vlaeyen, P. M. J. C. Wolters, M. Peters, and S. G. M. Stomp-van Den Berg, "Health care providers' orientations towards common low back pain predict perceived harmfulness of physical activities and recommendations regarding return to normal activity," European Journal of Pain 2005; 9(2):173–83.
- E. Coudeyre, F. Rannou, F. Tubach et al., "General practitioners' fear-avoidance beliefs influence their management of patients with low back pain," Pain 2006; 124(3): 330–337.
- D. P. Gross, R. Ferrari, A. S. Russell et al., "A population-based survey of back pain beliefs in Canada," Spine 2006; 31(18): 2142–2145.
- R. Buchbinder, D. Jolley, and M. Wyatt, "Population based intervention to change back pain beliefs and disability: three part evaluation," British Medical Journal 2001; 332(7301): 1516–1520.
- J. Latimer, C. Maher, and K. Refshauge, "The attitudes and beliefs of physiotherapy students to chronic back pain," Clinical Journal of Pain 2004; 20(1): 45–50.
- A. K. Burton, G. Waddell, K. M. Tillotson, and N. Summerton, "Information and advice to patients with back pain can have a positive effect: a randomized controlled trial of a novel educational booklet in primary care," Spine 1999; 24(23): 2484–2491.

Table 1: Statistical result for Physical Activity subsection of Fear Avoidance Beliefs Questionnaire

	Physical activity
Mann-Whitney U	3014.500
Wilcoxon W	8165.500
Z	-5.043
Asymp. Sig. (2-tailed)	.000

Table 2: Statistical result for Work Activity subsection of Fear Avoidance Beliefs Questionnaire

	Work activity
Mann-Whitney U	3116.000
Wilcoxon W	8267.000
Z	-4.786
Asymp. Sig. (2-tailed)	.000

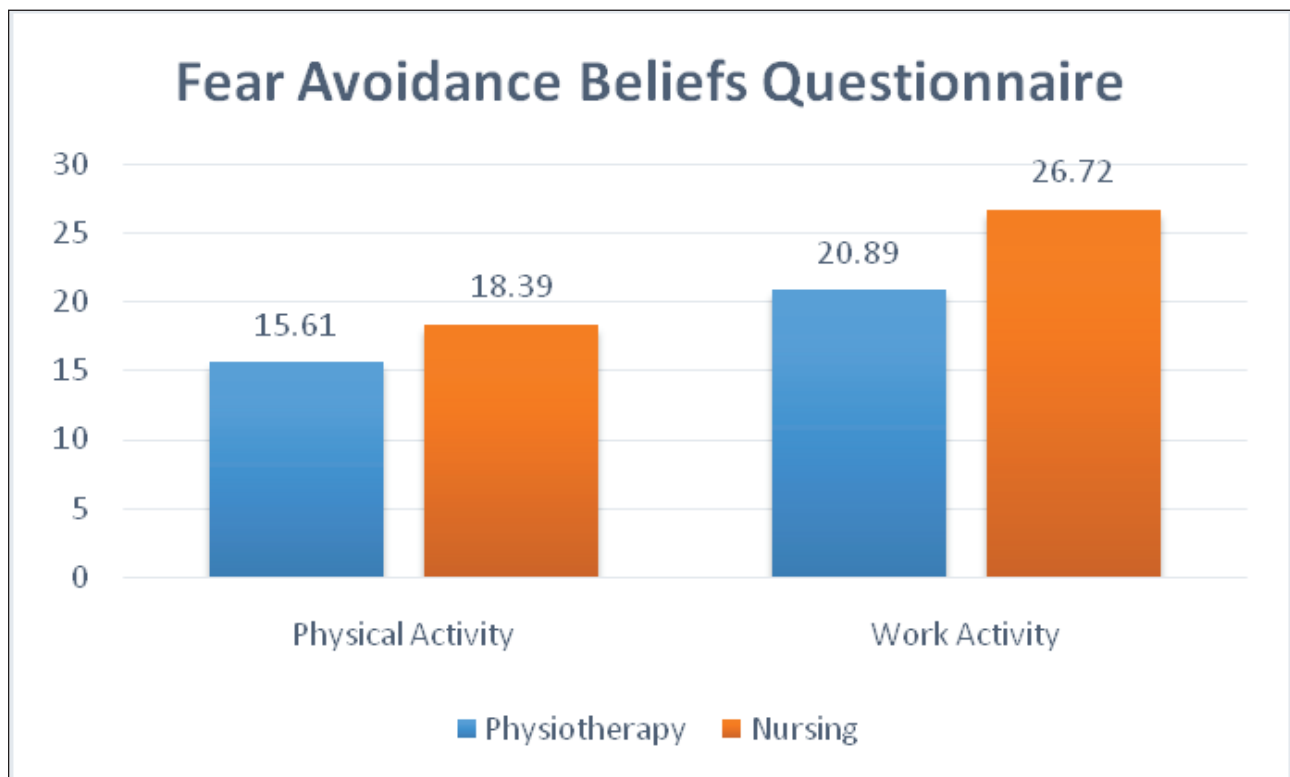


Figure 1: Results of Fear Avoidance Beliefs Questionnaire (FABQ).